

REMARKS

Claims 1-7 are pending in this application.

Claim 1-7 are amended and claims 8-17 are added herein. No new matter has been introduced.

Claims 1, 6, and 14 are independent.

Claims 2-5 have been amended to correct minor editorial errors.

Claims 8-17 have been added to recite additional features of the present invention.

Pending claims 1 and 6 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Number 6,356,409 to Price et al. (hereinafter referred to as Price), and pending claims 2-5 and 7 stand rejected under 35 USC §103(a) as being obvious over Price. To the extent not addressed by the amendments, the rejections are respectfully traversed.

The present invention provides a disk device which can be highly accurately balanced utilizing a small and lightweight balance weight. As disclosed in the second full paragraph of page 12 of the specification, a vector of a thin, "C" shaped balance weight combines with a vector of a small, "U" shaped auxiliary weight attached to the "C" shaped weight to provide a counter balance. This thin "C" shaped balance weight requires less space for mounting than prior art balance weights (see the paragraph bridging pages 3 and 4 of the specification). As a further advantage over the prior art, and as described in the paragraph bridging pages 12 and 13 of the specification, the present invention is protected from failure due to generation of metal powder from grinding between balance weights, as found in the prior art.

Claim 1, as amended, as well as new independent claim 14, require, inter alia, a disk recording medium and a rotary portion having a substantially cylindrical shape for

holding the disk. At least one end of the rotary portion includes a recess for receiving a balance weight having substantially a “C” shape. Further, at least one rectangular auxiliary weight, which is smaller than the balance weight, is attached to the balance weight.

Price neither teaches nor suggests that recited in independent claims 1 or 14 of the present application. As will be understood with particular reference to Figures 2, 3, and 7-9 and column 3, line 53, though column 4, line 7, of Price, two nested balance weights, each in the form of a clip or ring and each essentially identical, i.e., an inner clip/ring and an outer clip/ring, are mounted in a groove in a rotating portion of a disk device. Within the groove, the inner and outer clips/rings slide about one another to balance the disk device. Price simply does not disclose, or even suggest, a “C” shaped balance weight having a smaller, rectangular auxiliary weight mounted thereon, as required by independent claims 1 and 14.

Independent claim 6, as amended, requires, inter alia, measuring the unbalance of a rotary portion of a disk device, attaching an auxiliary weight to a balance weight based upon the measured unbalance, and then attaching the balance weight, having the auxiliary weight attached thereto, to the disk device. Conversely, in Price, the two balance weights are not attached to one another. Furthermore, Price does not teach or suggest measuring an unbalance condition, and then attaching an auxiliary weight to a balance weight based upon the measured condition. Rather, with particular reference to column 5, lines 10-28, the angle between the openings of the inner and outer clips/rings is adjusted, preferably using index marks on the rotating portion, based upon a measured imbalance taken while the inner and outer clips/rings are mounted in the rotating portion.

In view of the above, it is respectfully submitted that independent claims 1, 6 and 14 recite features that are neither disclosed or suggested by the applied prior art. Accordingly, it is respectfully requested that the Examiner reconsider and withdraw the rejection of independent claims 1 and 6, and that the Examiner allow new independent claim 14

Additionally, new independent claim 14 requires that the "C" shaped balance weight be formed by cutting the "C" shape from a metal plate. This feature is no way taught or suggested by Price. In Price, the clips, or rings, as disclosed in column 4, lines 35-39, expand or spring radially outward when inserted. As will be understood by one of ordinary skill in the art, the clips, or rings, disclosed in Price cannot be formed from a metal plate cut in the shape of the letter "C". Accordingly, for this reason alone, new independent claim 14 is allowable over the applied art.

The pending dependent claims of the present invention recite features which are neither taught or suggested by the prior art. For example, claim 2 requires, inter alia, that the auxiliary weight be "U" shaped and attached to the balance weight such that the opening of the "U" direct from an inner periphery to an outer periphery of the balance weight. As will be understood from the above, Price does not teach or suggest one weight attached to another weight, yet alone a "U" shaped weight attached as required by claim 2.

Dependent claim 3 requires that the "U" shaped auxiliary weight have an elasticity and be attached to the balance weight such that a portion of the balance weight is within the "U" shaped balance weight. Dependent claim 4 requires that the attachment between weights be by welding, and dependent claim 5 requires that the attachment be through bonding. As discussed above, Prince does not teach or suggest attachment, thus Price cannot teach or suggest that required by claims 3-5.

Accordingly, for the reasons above alone, dependent claims 2-5 are allowable over the applied art.

New dependent claims 8-13 and 15-17 are added herein to recite additional features of the present invention.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR 1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 520.43192X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Sterling W. Chandler', with a long horizontal line extending to the right.

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